

Zero Retries issue 0195 2025-03-28

Zero Retries is an independent newsletter promoting technological innovation that is occurring in Amateur Radio, and Amateur Radio as (literally) a license to experiment with and learn about radio technology. Radios are computers - with antennas! Now in its fourth year of publication, with 2600+ subscribers.

About Zero Retries

Steve Stroh N8GNJ, Editor

Web version of this issue - <https://www.zeroretries.org/p/zero-retries-0195>

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Request To Send

Commentary by Editor Steve Stroh N8GNJ

Paid Subscribers Update

My thanks to **Joe Hamelin W7COM** for upgrading from an annual paid subscriber to Zero Retries to a **Founding**

Member Subscriber this past week!

Founding members are listed in every issue of Zero Retries!

My thanks to **Prefers to Remain Anonymous 69** for *upgrading* from a free subscriber to Zero Retries to an **Annual Paid Subscriber** this past week!

Financial support from Zero Retries readers is a significant vote of support for the continued publication of Zero Retries.

#

Gratitude for Paid Subscriptions

This week I read a news article this morning about how the contracting US economy and continuing inflation is impacting almost everyone's income and basic costs of living.

After reading that article, I received two new paid subscriptions this week. Thus I'm grateful that so many folks, mostly Amateur Radio Operators, choose to support Zero Retries financially. I'm grateful for the revenue (which offsets expenses, and paid for some of our recent trip to HamSCI 2025 in Newark, New Jersey, USA).

*So, **Thank You**, paid subscribers, for the financial votes of confidence in Zero Retries!*

#

New Comments Record in Zero Retries 0194

We had a good time exchanging comments on the content of Zero Retries 0194 last weekend.

#

Updated Events Page

I've updated Zero Retries Interesting events for the first half of 2025 on the Zero Retries Guide to Zero Retries Interesting Events page (linked from the Zero Retries Guides top line menu item at www.zeroretries.org).

The upcoming events for me in 2025-1H are:

 [**LinuxFest Northwest 2025**](#)

2025-04-25 thru 27 in Bellingham, Washington, USA

 [**Hamvention 2025**](#)

2025-05-16 thru 18 in Xenia, Ohio, USA

 [**SEA-PAC 2025**](#)

2024-05-30 and 31 and 06-01 in Seaside, Oregon, USA

2025 has been, and will continue to be a *busy Zero Retries Interesting year* in our household. Between conference travel, lots of planned development work in N8GNJ Labs (in addition to helping development of the [**IP400 Network Project**](#)), participating in organizing [**GRCon 2025**](#), and culminating with travel to [**Pacificon 2025**](#) in October (we greatly enjoyed attending Pacificon 2024).

There is also a stealth project actively in development which will be a lot of fun, but a lot of work, which I can hopefully reveal next week.

###

Have a great weekend, all of you co-conspirators in Zero Retries Interesting Amateur Radio activities!

Steve N8GNJ

Leave a comment

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IP400 Software v1.0 Released

By Martin Alcock VE6VH

The IP400 Development team is pleased to announce the release of the production software, now at **version 1.0**. This release supports an SPI connection between a Raspberry Pi and the Nucleo CC2 experimenter module, and also contains software for the Pi to enable exchanges with the node over an Ethernet UDP connection. The code is available at the ADRCS GitHub site, <https://github.com/adrcs/ip400>.

Full release notes can be found in the Node software description document. Further announcements will be made in the ensuing weeks.

Editor's Note:

This is a huge achievement for the IP400 Network Project in its primary goal to release working IP400 Meshnode hardware for individual users in "mid 2025" to learn and experiment with [IP400](#). I can attest that VE6VH has been "burning the candle at both ends" for the past several months on this project and the hardware development is proceeding apace with the software development.

Kudos Martin!

Leave a comment

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Write for The SARC Communicator

By Steve Stroh N8GNJ

In this era, to have any significant impact with the current generation, Amateur Radio content needs to be freely available. This is especially critical for Amateur Radio to attract and inform potential new Amateur Radio Operators. Amateur Radio content that is hidden behind paywalls is invisible, and effectively irrelevant in this era.

I'm of the "printed magazines" era. I learned a lot from Popular Electronics, Byte, and more other magazines than I can count. And only a few of them were free (controlled circulation, fully supported by ads). In short, I love magazines and they (were) my favorite form of self education. Given the value I received in self-education, I had no problem paying for magazine subscriptions. (At one point in my early career, with far more income than expenses, and virtually no distractions from intensive reading and study, I subscribed to more than 50 monthly magazines. That's a longer story for some point in the future.)

Thus it took me quite a while to understand this era's requirement (no longer merely a preference) for free content. One factor is a lot of younger, curious techies just don't have the budget to afford subscription fees for magazines. For another, because of the Internet and now good translation, younger, curious techies anywhere in the world can access good content - as long as it's not hidden behind a paywall.

In the years since I've been publishing Zero Retries, I've been asked several times to write for publications that are paid circulation only - what I would write is a work for hire, owned by the organization, and thus my writing wouldn't be accessible to anyone who doesn't pay the subscription fee¹. I just learned of a notable exception to this - [The Spectrum Monitor \(TSM\)](#). While TSM is paid subscription only, the subscription fee is reasonable, with reasonable fees for back issues. TSM is interesting enough (and has interesting enough authors) that I'm now a paid subscriber. Another interesting factor of TSM is that writers for TSM are free to republish their material after it has been published in TSM. Thus I might consider submitting material to TSM, knowing that I can republish it in the open after it's appeared in TSM.

Other than exceptions like TSM, I've become a rabid advocate of free and open content for Amateur Radio (including publishing everything in Zero Retries in the open). I credit much of this perspective from my time involved with [Amateur Radio Digital Communications \(ARDC\)](#) and their requirement that work resulting from their grants be made freely available.²

For example, I have previously referred curious potential Amateur Radio Operators to the [archives of 73 Magazine in Digital Library of Amateur Radio & Communications](#) because they could read *all 43 years of 73* for free.

But as much fondness as I have for 73, having ceased publication in 2003, it's not exactly contemporary. But fortunately, there is a publication that is contemporary, and free. The best such free and open content I know of, for a *general audience* in Amateur Radio is [Surrey \(British Columbia, Canada\) Amateur Radio Communications](#) bimonthly newsletter [The Communicator](#). I call it a newsletterzine because it runs longer than 100 pages, thus definitely not your average Amateur Radio club's newsletter.

The overall design of The Communicator is very well done - it reads and "feels" like a magazine with two columns, lots of photos and graphics and pleasing layout, consistent fonts, etc. Kudos to Editor John Schouten VE7TI. SARC even cleverly offers The Communicator as an online magazine if you're viewing on a desktop / laptop / tablet by using the [Calaméo](#) platform - see the [March - April 2025 issue via Calaméo](#).

One primary reason I like The Communicator is that it regularly includes Zero Retries Interesting content. The current issue includes articles on Amateur Radio Television (ATV), Amateur Radio satellite operation, experimentation, microwave operation, but no regular (that I recall) coverage of data communications in Amateur Radio. *Hmmm...*

A lot of writers I respect and enjoy reading are now regular contributors to The Communicator. I plan to join them in writing for The Communicator because some of the topics I write about in Zero Retries would benefit from wider exposure to a general Amateur Radio audience, such as the IP400 Network Project, the M17 Project, MMDVM-TNC, and others.

Thus I invite Zero Retries readers and potential writers of all general interest topics in Amateur Radio - construction, operating, clubs, etc. to consider also writing for The Communicator. The contact information for The Communicator is on the first "inside" page. Amateur Radio really needs a free, good, and interesting general interest publication like The Communicator. Please spread the word!

Leave a comment

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ZR > BEACON

By Steve Stroh N8GNJ

Short mentions of Zero Retries Interesting items.

Last Few VE7DXW RF Seismograph Boards Available

For background, see <https://www.qsl.net/rf-seismograph/>

From Phil Moscinski N2EU via email:

As you know, our mutual acquaintance Alex Schwarz VE7DXW became a Silent Key in June, 2024.

I have five (perhaps the last five) of Alex's [LIF2016 boards](#) left. I'm asking \$50 each, plus shipping. The proceeds will go to Alex's wife Claire.

Alex's website of his RF Seismograph research, and the details on the boards and downloads are at <https://www.qsl.net/rf-seismograph/>.

To purchase one of these boards, please email me - pmoscinski@gmail.com.

#

Excerpts from ARDC 2024 Annual Report

[ARDC 2024 Annual Report](#):

- A full description of all ARDC grants awarded in 2024.
- In 2025 the ARDC Tech Team will be focusing on the following efforts:
Release the VPN PoP project. This service will provide access to 44Net resources via Wireguard. Work is underway to integrate it with the Portal in time for a wider beta release by the end of the year.
- Unveiling a [report](#) on from the first ARDC Grants Evaluations Team (GET).

I was very interested in seeing the complete list of all of the 2024 grants, particularly:

Deutscher Amateur-Radio-Club e. V. on behalf of Online Amateur Radio Community (OARC) & Localino

New Packet Radio Version 3.0 / Seeding UK and Ireland Usage
Expanding New Packet Radio capabilities in the UK and Ireland.

and

Multimode Digital Voice Modem (MMDVM) Multimode Digital Voice Modem (MMDVM) Project

Continue full-time development of its open-source digital voice modem, which supports multiple amateur radio modes.

#

[TIDRADIO H3 5W Multi Band Portable Radio](#)

This radio was mentioned favorably in the comments of a previous issue, and it seems a remarkable value for \$31, including a larger color display, USB-C interface for programming and charging, and Bluetooth.

The web page says "support open source" and thus I think this is one of the portable radios where alternative (the reference to open source?) firmware has been developed. A quick web search didn't find any references other than Amazon and the company website.

Post Publication Update 2025-03-29

*The Zero Retries readers came through **spectacularly** on my "no references found for third party software" complaint.*

- Nicsure alternative firmware for the TIDRADIO H3 - <https://nicsure.co.uk/>
- Nicsure alternative firmware v1 and v2 - <https://nicsure.co.uk/h3/nightly.php>

- *Nicsure Manual version 2.0 - V2 Manual:* <https://github.com/nicsure/nicfw2docs/blob/main/TIDRADIO%20TD-H3%20User%20Manual%20for%20nicFW%20V2.pdf>
- *Nicsure Github repository* - <https://github.com/nicsure>
- *Nicsure YouTube channel* - <https://www.youtube.com/@nicsure>
- *Tech Minds video on this radio* -

- *Another interesting video on this radio* -

- *A video with these radios used in an AllStar node:*

My thanks to Tom Salzer KJ7T, Joe “Uncle Milburn” Hamelin W7COM, Ren Roderick KJ7B, and David Gleason NR9V for rescuing me from an incomplete story.

#

[FOSDEM 2025 video on Hamnet Now Available](#)

See previous coverage in Zero Retries 0188 - FOSDEM 2025 - HAMNET - Status Update.

My thanks to Alexander von Obert DL4NO for informing me about this video.

Leave a comment

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To receive new issues of Zero Retries every week via email, become a free subscriber. To support Zero Retries, paid subscriptions are appreciated, *but entirely optional*.

Zero Retries Boilerplate

The [Zero Retries Store](#) is now open for business with quality Zero Retries branded merchandise and items being retired from Steve’s N8GNJ Labs.

These bits were handcrafted (by a mere human, not an Artificial Intelligence bot) in beautiful Bellingham ([The City of Subdued Excitement](#)), Washington, USA, and linked to the Internet via [Starlink Satellite Internet Access](#).

See the **Zero Retries Boilerplate** page for significant acknowledgements and other information relevant to Zero Retries. For new readers of Zero Retries, that page, and the **About Zero Retries** page has useful information to check out.

My ongoing *Thanks* to:
Tina Stroh KD7WSF for, well, *everything*!

Jack Stroh, Late Night Assistant Editor Emeritus
Shrekly Stroh, Late Night Assistant Editor In training

Annual Founding Members who generously support Zero Retries financially:

Founding Member 0000 - Steven Davidson K3FZT (Renewed 2024)
Founding Member 0001 - Randy Smith WU2S (Renewed 2024)
Founding Member 0002 - Chris Osburn KD7DVD (Renewed 2024)
Founding Member 0003 - Don Rotolo N2IRZ (Renewed 2024)
Founding Member 0004 - William Arcand W1WRA (Renewed 2024)
Founding Member 0006 - Todd Willey KQ4FID (Renewed 2024)
Founding Member 0007 - Merik Karman VK1DF / VK2MKZ (Renewed 2024 *with two Founding Member subscriptions!*)
Founding Member 0008 - Prefers to Remain Anonymous 14 (Renewed 2024)
Founding Member 0009 - Prefers to Remain Anonymous 19 (Renewed 2025)
Founding Member 0011 - Rick Prelinger W6XBE (New 2024)
Founding Member 0012 - Ryan Tolboom N2BP (New 2024)
Founding Member 0013 - Newton White N4EWT (New 2025)
Founding Member 0014 - Joe Hamelin W7COM (New 2025)

Numerous Annual and Monthly subscribers who also generously support Zero Retries financially!

You thousands of readers of Zero Retries without which there would be little point in publishing this newsletter.

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Footnotes for this Issue

To see the relevant sentence for the footnote, just click the footnote number.

[1](#)

I made an exception to my “don’t write for content behind a paywall” when I was asked to contribute to the 100th Edition of the ARRL Handbook. Books, especially reference books, are a different category (at least in my perspective).

<https://www.ardc.net/apply/grantmaking-categories-goals/>

Because ARDC works with and for the public, we require that the work of the projects we fund be freely available to everyone who can benefit and to everyone who can contribute. Thus all technology, documentation, and other materials produced using ARDC funds must be made freely available to the public.